REMARKS

The Office Action included a restriction requirement. In response to this requirement, the provisional election to prosecute Group I, claims 1-9, is affirmed. Claims 10-20 are cancelled without prejudice, but the right is reserved to prosecute their subject matter and other disclosed, but unclaimed, subject matter in a divisional application. New claims 21-27 have been added to cover preferred embodiments of the invention. These claims do not introduce new subject matter and their recitations are supported in the originally filed claims. As such, claims 21-27 should be entered into the present application at this time. Also, new claims 21-27 correspond to the elected group, so that claims 1-9 and 21-27 should be examined together at this time.

The specification and claims have been amended to correct the use of the term, "form of revolution". Due to a translation error, this term appeared as "generated by revolution" in paragraph [0016] and claim 3. There is support for the corrected term in the originally filed application, such as in paragraphs [0019] and [0022], as well as in the now-canceled claim 15. Additionally, the PCT parent application hereof, which has been incorporated by reference in the present application, states that the product can have "any form of revolution" (Page 3, line 39). As one of ordinary skill in the art would understand, a form of revolution generally is a three-dimensional shape that is symmetrical around a central axis and can be obtained by revolving a curve about that axis.

Fig. 3 has been amended to show an external packaging 19 that encloses the strips of thermoformed plastic material, as disclosed in the specification in paragraphs [0009] and [0030]. A formal drawing sheet of this figure is submitted herewith to replace the previously submitted corresponding sheet in the file of the application. Additionally, paragraph [0030] has been amended to reflect the drawing amendment in Fig. 3.

Claims 1, 3, 4, and 6 were rejected under 35 U.S.C. § 102(b) as anticipated by Durst. Claim 1 is directed to a frozen confectionery having an even roundness and a cohesion of greater than 95%. The roundness of the frozen confectionery is such that it essentially lacks rough edges and forming tool marks.

In contrast, Durst teaches an apparatus used to form spheres of comestible by injection molding. The comestible is introduced into a mold having a fixed upper part 8, in the shape of a hemisphere, and two lower part quadrispheres 9,11 that pivot to close the spherical mold. A scraper 14 rotates along the inner surface of only the fixed upper part to free the comestible from the mold (Durst 3:4-24).

Durst does not teach all of the elements of claim 1. Durst teaches the use of a scraper that rotates only over the top half of the formed comestible (Fig. 3). This would leave a ridge along the equator of the formed sphere at the bottom edge of the scraper's trajectory, adjacent the unscraped portion. Moreover, a build-up of excess comestible would remain along the leading edges of the scraper forming a ridge that would make the surface of the sphere notably uneven.

This is contrary to the confectionery of claim 1, which has an even roundness and lacks forming tool marks. The claimed item provides the surprising benefits over Durst that this lack of marks and its roundness is more aesthetically and gastronomically appealing to the consumer. Especially compared to the Durst comestible, the claimed item lacks the tool marks and rough edges that are typically associated with a cheap quality confectionery, and has a much more even texture in a consumer's mouth, which is perceived as being more delightful and smoother. When certain shapes are formed, such as the fruits of claim 4, the claimed item can more closely resemble the fruit or other desired shape. Overall, the consumer is left with an impression of much higher quality and desirability than the Durst comestible can provide, which is visually and texturally much less attractive.

Additionally, the specification of the present application teaches the deficiencies in prior art that use molding hemispheres to shape a confectionery (paragraph [0004]). As explained, the hemispheres of Durst would leave visible mold joints on the surface of the confectionery where the hemisphere parts of the mold meet, due to the inconsistency and gaps in molding surface. In fact, the mold of Durst would leave visible mold joints not only on the equator of the comestible sphere, where the upper hemisphere 8 meets the two lower quadrispheres 9,11, but also along the bisection of the lower portion of the sphere where the two quadrispheres 9,11 meet each other. These visible mold joints are contrary to the confectionery of claim 1 that has an even roundness and lacks forming tool marks. The Durst teaching thus provides no suggestion of how to obtain the claimed confectionery item, since Durst would produce the tool marks and rough edges recited in claim 1.

Claim 1 is also not anticipated by Durst because Durst does not disclose a frozen confectionery having a cohesion of greater than 95%. Cohesion is defined in the specification of the application as the percentage ratio between the height of the confectionery just before hardening, and the height of the confectionery at the outlet of the extrusion nozzle (paragraphs [0016] and [0017]). Achieving a cohesion of greater than 95% offers the surprising advantage that it causes the confectionery to experience minimal

deformation and maintain an even roundness as it passes through remaining stages of the manufacturing process.

On the other hand, Durst makes no mention of achieving a cohesion of greater than 95%. The Examiner relies on a disclosure in Durst that refers to the 1-5% change in volume of comestible injected into the mold (Durst 4:58-60). This range, however, has nothing to do with the cohesion of the formed comestible. To determine cohesion, the height of the comestible after molding must be compared to the height of the comestible just before hardening. While the height of the comestible in the mold could be calculated based on the height of the mold itself, Durst does not disclose the height of the comestible just before hardening, or even when during the manufacturing process hardening is achieved. Therefore, it is impossible to determine any cohesion, let alone a cohesion of greater than 95%, of the formed comestible in Durst.

Additionally, there is no suggestion in Durst to use such a high cohesion value, since the quality and shape of the formed comestible exiting the mold inherently will have many imperfections due to the molding process. Therefore, Durst does not foresee a need to maintain the molded shape of its comestible because the molding and scraping process already deforms the molded shape and produces many imperfections. Consequently, there is no suggestion in Durst of a high cohesion value, or other features that are used to maintain the shape that is produced.

Claim 3 is not anticipated by Durst because Durst does not disclose a frozen confectionery obtained by extrusion-forming at a temperature of -7 °C or less. This process of preparing the claimed item defines the physical characteristics of the item. Specifically, the extrusion will be free from forming tool marks. Furthermore, cohesion is directly related to the temperature and consistency of the confectionery: the colder the confectionery is, the harder its consistency will be, which results in a higher cohesion because there will be less of a change in the height of the confectionery due to melting. The claimed temperature of -7 °C or less has a significant effect on the cohesion and provides the surprising advantage over Durst that it facilitates obtaining the high cohesion, which maintains the high quality and smoothness of the shape that is made possible by the extrusion process. Consequently, the process recitation of claim 3 should be given patentable weight, and Durst does not teach or suggest the resultant confectionary item.

For at least these reasons, claims 1 and 3 are patentably distinct from Durst on their own merits.

Claims 1, 3, and 4 were also rejected under 35 U.S.C. §102(b) as anticipated by Hector. However, for similar reasons as Durst, Hector also does not anticipate all the elements of claim 1. The device in Hector discloses the use of at least one hemispherical scoop 8 as a mold to carve out spherical portions of ice cream by rotating from a convex position (Fig. 4) to a concave position (Fig. 5). A scraper 10 passes over the upper half of the spherical portion to extract it from the remaining feed of ice cream (Hector 9:31-55). The rotation of the scoop creates tool markings on the surface of the spherical portion. This is because excess ice cream would collect in areas where the leading edge of the scoop comes to a rest after rotating from the convex to concave positions, i.e. along half the equator of the sphere, just like the appearance of an ice cream ball scooped by hand has ridges left by the scoop and any scrapers. In addition to tool marks left by the rotating scoop, the scraper also passes over the upper half of the portion. This movement would also leave a buildup of excess ice cream in areas where the leading edge of the scraper comes to a rest, i.e. along the other half of the sphere's equator. The buildup of excess ice cream around the equator of the sphere is contrary to the even roundness and lack of tool marks and rough edges that is recited in claim 1. As discussed above, it is the even roundness and lack of tool marks that surprisingly makes the frozen confectionery visually more attractive, and also offers the consumer a better eating experience.

Claim 1 is also not anticipated by Hector because Hector does not disclose a frozen confectionery having a cohesion of greater than 95%. Hector does not inherently teach a cohesion of greater than 95%. Determining cohesion requires more than simply the height of the portion after being formed in the scoop; the height of the portion just before hardening is also required. Nowhere in Hector is the hardening of the portion disclosed, and it cannot be assumed that the ice cream portion hardens while still in the scoop. Thus, Hector does not inherently teach a cohesion of greater than 95%.

Additionally, Hector does not suggest an ice cream portion with a high cohesion, since the quality and shape of the portion exiting the mold inherently will have many imperfections due to the molding process. Therefore, Hector does not suggest a need to provide a portion that can closely maintain its molded shape, as is beneficial with a high quality shape as defined in claim 1.

Claim 3 is also not anticipated by Hector because Hector does not teach extrusion-forming at a temperature of –7 °C or less. As discussed above, extrusion-forming offers the surprising advantage of producing a frozen confectionery having an even roundness and lacking forming tool marks. The temperature of –7 °C or less surprisingly

facilitates the achievement of a cohesion of 95% or greater, which has significant effect on maintaining the even roundness. The portion disclosed in Hector has none of the product characteristics, i.e. even roundness or 95% cohesion, recited in claim 3 and there is no suggestion to take steps to maintain the shape, since it already has substantial imperfections coming out of the scoop. As such, Hector does not anticipate claim 3.

For at least these reasons, claims 1 and 3 are not anticipated or suggested by Hector.

Claims 1 and 4 were also rejected under 35 U.S.C. §102(b) as anticipated by Tarr. Tarr discloses the use of a semi-spherical ice cream cup 30 used to form balls of ice cream. A supply of ice cream is pushed downward by a piston 22 through a container 14 and into the cup to form the lower half of the ice cream ball. Oscillating movements are then imparted on a knife 40 as the semi-spherical cup rotates about the knife to free the ball from the excess ice cream (Tarr 2:47-69; 3:19-25). The oscillating movements of the knife, as well as the rotating cup, would impart noticeable tool markings on the surface of the ice cream balls. Similar to the device in Hector, excess ice cream would build-up on surface of the ball where the leading edges of the oscillating knife and the rotating cup come to a rest. This is contrary to the frozen confectionery disclosed in claim 1, which has an even roundness and essentially lacks rough edges or forming tool marks, which in turn provides the surprising benefit in view of Tarr that the confectionery looks and tastes better.

Tarr does not teach an ice cream ball with a cohesion of 95% or greater. The Examiner implies that cohesion of 100% is achieved in Tarr since the height of the ice cream ball does not change after being formed by the knife. This is not the correct measure of cohesion, however. It is necessary to know the height of the ice cream ball just before hardening, and there is no disclosure in Tarr that the ice cream ball hardens after the knife passes over the top half of the ball. In fact, Tarr actually teaches away from this characteristic because the ice cream is constantly sealed from exposure to refrigerated space during the formation process to prevent the ice cream from becoming "tough and leather-like" (Tarr 3:51-61). Thus, the formed ice cream ball of Tarr is not designed to ever reach a hardened state, and a cohesion value cannot be determined.

For at least these reasons, there is no teaching or suggestion of the invention of claim 1 in Tarr.

Claims 8-9 were rejected under 35 U.S.C. §103(a) as obvious over Durst, in further view of Raitt. Claim 8 is directed to a plurality of frozen confectioneries of claim 1 that are placed upon cells in a bottom strip of thermoformed plastic material. A cover strip of

thermoformed plastic is placed over the bottom strip and locked into place to add further protection to the top portions of the confectioneries. The bottom and cover strip assembly is then enclosed by an external packaging.

Conversely, Durst teaches a formed comestible that is deposited on an individual tray. The tray is designed only to move a formed comestible along the conveyor from station to station for additional processing. Moreover, the formed comestible is exposed to the environment and is not covered (Durst 2:46-51).

Raitt, meanwhile, is directed to a machine used to dispense individual scoops of ice cream 33 that are lodged in pre-cut openings 32 along a continuous strip of flexible plastic 31. The plastic strip is fed through a dispensing portion of the machine where a plunger 41 pushes each scoop out of opening, allowing the scoop to fall out of the machine. The thin plastic strip on which the ice cream balls are lodged does not cover the top and bottom portions of the balls, and instead leaves them fully exposed. This is necessary in Raitt because the balls are pushed out of the strip, which is merely used to transport the balls to adjacent the head 42 for dislodgement. If the balls were enclosed, the balls could not be pushed out by the Raitt system, and the Raitt teaching would be rendered inoperative.

For at least these reasons, claim 8 is not taught or suggested by any combination of Durst and Raitt.

New claims 21-27 are also believed to be patentably distinct from the references based on their own merits.

Applicants note that the Office Action Summary Sheet did not have a checked box acknowledging a claim to foreign priority of the present application. It is respectfully requested that in the next communication, the claimed priority be acknowledged as shown in the Filing Receipt and the executed Inventor's Declaration.

It is believed that the entire application is presently in condition for allowance. Should any issues remain, a personal or telephonic interview is respectfully requested to discuss the same in order to expedite the allowance of the application.

Respectfully submitted,

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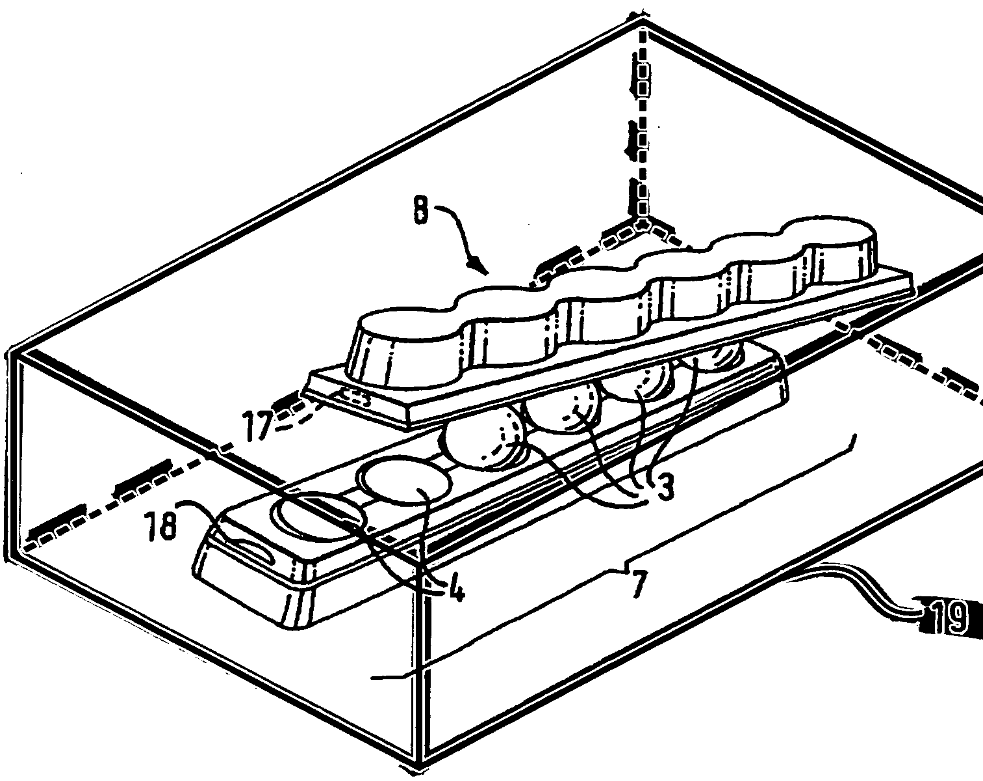

FIG. 3